Report Preparation Guidelines

Overview

Preparation and Submission

- Word Processing
- Report Sections, Required and Optional
- Illustration Guidelines
- Submission Checklists

Content Development, Basic Writing and Editing

- Guidelines: Individual Topics, as listed on the following page
- Lists: Spelling, Common Abbreviations, NPS Designations, Park Acronyms

References Cited, provided as linked documents:

- Standard References Cited: Overview, Examples, Discussions
- Referencing and Citing Internet Sources
- References Cited in the Guidelines, and Suggested Readings

To Get Started

Internal Links

Headings and page numbers in the **Table of Contents** are linked to the corresponding sections. Click on any second-level heading within the guidelines to return to the Table of Contents.

When using the electronic version of this document, click on the bolded crimson phrases and page numbers to go directly to the linked section. For example, **Part II: Content Development** begins on page 10.

From here, go directly to the Spelling Guide or the complete list of NPS Park and Office Acronyms.

External Links

Words and phrases in bolded green are linked to expanded discussions of specialized topics and the submission checklist. For example, click on **References Cited** for an overview and numerous examples of complete reference entries. Or go directly to one of the other linked supplementary documents:

Citing Internet Sources
Enhancing Readability
References Cited
Report Submission Checklist
Illustration Submission Checklist

Searching

Press Ctrl+F to use Acrobat Reader's Find function to search on any character string. Repeat the search with Ctrl+G. As an alternative to searching, click on Table of Contents.

More Help

For details on using Acrobat Reader more effectively, go to Using Acrobat Reader.

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Part I: Preparation and Submission

Structuring the Document

Figure layout and final page appearance such as treatments given to fonts, headings, lists, etc. are late-stage production matters performed by the Report Production Team. Please do not give your document any particular appearance. Files submitted with a structured format must be stripped of all characteristics before the file contents are put into Report Production Team templates. Keep word processing as simple as possible and rely on low-tech methods of structuring the document, as summarized in the guidelines for greater efficiency at both ends of the process.

Figures must not be embedded in text files or otherwise submitted as .doc files. Rather, they need to be kept in their native format, and if necessary, coverted to IBM compatible (PC) format.

Our reports have traditionally been produced as hard copy only. Consider the advantages of distributing an electronic report, or PDF file, on compact disk. Preparation of a report for compact disk distribution is quite different from the preparation of a hard-copy-only report. Therefore, authors must decide early (well before submission) if the report will ultimately be distributed on disk. A report can be a combination—for example, we have prepared several short hard-copy reports with appendices on disk consisting of extensive data files.

As you start to prepare your report, discuss with your program manager and the Report Production Team your options and the pros and cons of the two basic forms of distribution discussed above.

Guidelines for All Types of Reports

Do

- use left-only alignment
- leave headings unformatted
- use a page break (CTRL+ENTER) to end a chapter, not a series of hard returns
- use one-inch margins for all pages

Don't

- type anything in ALL CAPS, except acronyms
- use the spacebar to create an indent effect
- · reset margins
- create text in headers or footers
- use tabs to create paragraph indentations
- apply the footnote, endnote, and Table of Contents functions
- use spaces or tabs to give a centering effect for lines of text
- use hanging indents or double indents

Headings

- limit headings in depth or degree of embedding—do not go below the fifth level (page 12)
- headings should be unformatted at the time of submission
- type each heading flush left, apart from the paragraph, typed in uppercase and lowercase
- begin each heading with a level indicator to indicate its relative level within the report structure
- omit treatments such as underlining, italics, bold, all caps, small caps, centering, embedding within the paragraph, and indenting
- How to show headings and their relative levels in the heading hierarchy: place each heading flush left on its own line, begin with the level of heading as shown in the examples below; use upper and lower case:

- H1 Previous Field Seasons
- **H2 Project Origins**
- H2 Project Purpose and Scope
- H2 First Field Season
- **H3** Test Excavations
- H4 Test Unit 1

Note: this example shows only the headings for part of a hypothetical report. In a real situation, there would be paragraphs of text between the headings.

Tables

Do

- Set tabs for each table and tab-align the columns of numbers or words under their headings.
- Consult the Report Production Team if you feel that your tables are complex or long enough to warrant using one of the several Microsoft Office table functions—we can make suggestions that will save you time and effort.
- Pen in horizontal framing lines on your hard-copy draft, if necessary, rather than inserting computer-drawn lines.

Don't

- merge cells
- use the spacebar to get your columns to look aligned on your screen
- use complex formats and functions
- insert any horizontal framing lines into draft tables

References Cited

Do

• include all punctuation, including all that occurs in publication titles

Don't

- no indentations
- no italics, bold, or underlining

Footnotes and Endnotes

Do

- indicate the placement of a note in brackets: [F1], [F2], [F6] and so on, or [E1], [E2], ...
- prepare a separate file that contains the note text

Don't

• please do not use the computer's footnote and endnote functions

Parentheses, Common Uses

- citation of literature references, figures, and tables
- acronym introductions
- · measurement equivalents and similar technical inserts such as species or common names

Parentheses, Other Important Uses

to enclose numbers and letters when they designate items in numbered and lettered lists

• examples:

Subsurface excavations will consist of: (1) backhoe trenching, (2) cleaning and examination of trench profiles, (3) sampling of subsurface features exposed in profile, and (4) hand excavation of 1-x-1-m units to expose the best-preserved features.

Figure 6. Hafted bifaces recovered at Lithic Concentration 1: (a) gray and white quartzite biface, Field Cat. No. 5038; (b) chert projectile point midsection, Field Cat. No. 5004; (c) white agate point fragment, Field Cat. No. 5064, (d) etc., ...

Keystroke Guidelines

- One space after a colon and a final period is preferred.
- When setting off a long quotation or other special text, use the same margins and indentations as the rest of the text; place a note in the document in brackets such as [block quote] or handwrite a note on the hard copy.
- Insert a comma before the final conjunction in a series:

Example: The primary colors are red, blue, and yellow.

Not: The primary colors are red, blue and yellow.

- Place commas and final periods inside quotation marks "As can be seen," he said, "in this example."
- Hyphenate compounds according to the standard rules described in these guidelines and related style guides, such as those for *American Antiquity* and *Historical Archaeology*:

a series of 1-x-1-m test units a 3-m-deep trench several well-preserved features a single-component site the distribution of piece-plotted artifacts and a 2.8-cm-diameter hole

Required Sections

- Title Page
- Abstract or Executive Summary
- Table of Contents
- List of Tables
- List of Figures
- Figure Caption List
- Report Body; several main sections or chapters, such as:

Introduction, Previous Research, Methods, Results, Artifacts, Conclusions

· References Cited

Optional Sections

- Epigraph
- Acknowledgments
- Preface by the author
- Foreword introductory remarks by someone other than the author
- Epilogue
- Afterword
- Tables
- Figures
- Appendix or Appendices; each appendix should have its own References Cited section

Order of Sections

Title Page Introduction

Epigraph Main Report Sections

Abstract, Executive Summary

Acknowledgements

Table of Contents

List of Tables

Conclusions

Epilogue

Afterword

References Cited

List of Figures Tables
Foreword Figures

Preface Appendix, or Appendices A, B, C, etc.

Note that the first column shows the sections often referred to as "the front matter." No report has yet contained all of the above-listed sections. On the other hand, some reports lack a common section, such as an Acknowledgments or Tables section.

Information for Some Reports

- basic accession information, as described in MWAC Collections Reporting Guideline No. 2.
- a National Technical Information Service (NTIS) report documentation page, Form OF-272.

Illustration Submission Guidelines

General Information

It is important to carefully consider the information needed on an illustration and to convey only the necessary elements pertinent to a report. The illustrator will be happy to assist authors in developing illustrations for their reports. Many illustrations, particularly park maps, are already drawn and can be easily modified. Ask the illustrator for assistance in locating existing maps and illustrations.

Types of Illustrations

• Continuous Tone (Grayscale or Raster). Examples of continuous tone illustrations are black-and-white and color photographs, topographic maps, rubbings, profile drawings with solid shaded fill, or any image that contains solid shading. Submit the best image possible.

Special Considerations for Continuous Tone Images

Color and B/W Photographs: Submit original photographs as glossy prints or as high-resolution digital files. Glossy prints must be at least snap shot size, approximately 3.5" x 5". Camera settings for photographs taken with digital cameras must be for high-resolution. Check camera instructions for settings to use for "printed images," not for "screen viewing" images. Please avoid submitting color photographs that will need conversion to black and white (grayscale) images. Color prints do not generally convert and reproduce well as grayscale images. However, if this is the only option, the illustrator will reproduce the best quality B/W image possible.

Previously Printed Illustrations: Commercial materials previously printed (topographic maps, illustrations from books, etc.) do not always reproduce well because they have already been half-toned or scanned. Consequently, a moiré pattern will develop during reproduction. Image manipulation software will eliminate most or the entire moiré pattern, however, reproduction quality will be diminished. If reproduction from previously printed materials is the only option, the illustrator will reproduce the best quality image possible. Please try to provide the original print, negative, or a glossy photographic copy of the original.

• *Line Art (Vector)*. Examples of line art illustrations are maps, profiles, site excavation plans, artifact drawings, or any other images that do not contain solid shading or fill.

Base Material

Provide the illustrator with the highest quality base material available to use for illustration production. Good quality originals or digital data produce good quality reproductions. Examples of base materials include photocopies, plan maps, copies of fire insurance maps, copies of existing maps (both paper and digital files), coordinate data, artifacts, field drawings, notes, and tracings. The authors do not need to redraw base material for the illustrator. Instead, if the base material is complex, supply a list or highlight the features to include or exclude in the final image. You can also submit written instructions without any base materials.

Author's Instructions to Illustrator

The authors DO need to provide clear instructions for each illustration. Clear instructions ensure efficiency by reducing cycles of modification, delays, and interruptions for authors and the illustrator. It is the illustrator's responsibility to produce the images, sometimes from a variety of sources.

Example Submissions and Instructions. Directly below are examples of materials and instructions for the development of various illustration.

M = author-supplied materials; I = instructions.

Cropping an Image:

- (M) Author provides an existing map of a historic feature and photocopy of the map.
 - (I) Figure 3 Produce clean version of feature for this report and possible future reports. Crop map (approximately) as indicated by the box drawn on photocopy. Digitize all information from original map. The original historic map has obvious stray marks and handwritten notes; do not include any stray marks or notations on the newly created version.
- (M) Author provides a photograph and written instructions only.
 - (I) Figure 4 The important feature to illustrate is the cabin in relation to the lake. Scan, crop, and enlarge image so that cabin and shoreline are dominant while still showing some of the surrounding area.
- (M) Author provides the original photograph with a post-it indicating area to crop.
 - (I) Figure 5 Scan photo and crop from left (approximately) at post-it. Include remainder of photograph and try to enhance image quality.

Labeling an Image:

- (M) Author provides photocopy of a profile drawn at the site and a photograph of the same profile.
 - (I) Figure 20 The finished figure will consist of only the photograph. Combine the information circled in green on the profile drawing with a scanned photo image to create Figure 20. Emphasize the profile levels and label with I, II, etc. (Do you have any suggestions on how to emphasize the profile levels?) Also, add vertical and horizontal scales.
- (M) Author provides topographic map and photocopy of topographic map with approximate location of boundary indicated.
 - (I) Figure 50 Indicated on photocopy is the extent of area to reproduce. Scan original topo map and add site boundary line. Label with site number 0X000.

Creating Five Maps for a Multi-Year (4-Year) Project:

- (M) Author provides a 24" x 36" field drawing for the current project year along with a copy of the field notes, coordinate/distance information, and a topographic map. Also provided are photocopies of existing maps for each of the three previous years and the corresponding digital files.
 - (I) Figures 1–5: Produce five maps, illustrate the work done in each year of the project, and a compilation map of all four years. Maps 1–3, existing digitized maps were produced in the

field by a different archeological student each year, and they are not finalized nor standardized. Map 4, digitize map of current field year using the materials supplied. Map 5 is a combination of all work done over the past four years. It is not necessary to have the elements of each year identified as such, the purpose is to show a combination of all elements from all field projects without distinguishing between years. I noticed that some of the information on the four maps is unnecessary, and I have highlighted those elements that can be deleted.

Standardize the maps so that they are stylistically the same. All maps must be reproduced in black and white; absolutely no color can be used. Include all test units, shovel tests, historic buildings with related features, locations of artifacts, topographic lines, roads, and water features. Since the maps are very complex, I have probably left a lot open for discussion.

I will be available for the next two weeks, and then I will be in the field for two months. Please feel free to see me regarding this project for any additional information, clarification, or suggestions before I leave. Any further discussion will need to wait until I return.

Author-Supplied Finished or Completed Illustrations

Often times an author will submitt illustations that are identified as finished or completed. Keep in mind that finished or completed illustrations need no further manipulation and are in a print- or camera-ready format. If you are unsure, then do not submit as finished. If the author is supplying finished digital illustrations, do not embed them in a document file. Rather, supply each illustration as a separate file in the native format or convert it into a format that is Windows compatible (IBM-PC). If you are not sure what format to submit, ask the illustrator for assistance.

Report and Illustration Submission Checklists

An essential part of the submission process is to fill out the submission checklists completely and turn over all report materials and forms to your program manager. To access the submission checklists, click on:

Report Submission Checklist

Illustration Submission Checklist

Part II: Content Development

Abstracts and Executive Summaries

- The Abstract is normally the first numbered page, roman numeral one (i) at bottom center.
- Do not introduce or use acronyms in the Abstract and do not cite references.
- The Abstract should not take up more than one finished page, which is close to 600 words or 2,800 characters. Using Word, select the portion of text to be counted, or make no selection to count the entire document, then apply Tools > Word Count.

Some reports require an Executive Summary instead of an Abstract. The author must determine prior to report submission which is appropriate. Supervisors, park managers, or liaisons with other agencies may be consulted on this matter. Like an Abstract, an Executive Summary is normally the first numbered page. Unlike an Abstract, an Executive Summary has no word or page limit.

Note: A Foreword and a Preface are optional; they are the last portions of the front matter, i.e., they appear just before the Introduction or other first chapter of the main report body. A Preface is written by the author, whereas a Foreword is written by a colleague. If both are included in one report, then the Foreword appears first.

Abbreviations and Acronyms

- Do not introduce or use acronyms in the Abstract, Acknowledgments, Preface, or Foreword.
- Introduce each acronym in the body of the report at the first use of the full name, concept, procedure, policy, or item of equipment.
- After an acronym is introduced, use it consistently throughout the rest of the report.
- Use acronyms sparingly. An excess of acronyms diminishes the usefulness of each acronym.
- Avoid abbreviations if an acronym can be used for agency and institution names. For example, NPS and USDI are acronyms, whereas Nat. Pk. Serv. and Int. Dept. are abbreviations.

Just because a name or term can be reduced to an acronym or an abbreviation does not mean it should be. There is no requirement that every possible acronym must be introduced and used. Do not introduce and use an acronym just because one exists in common usage or appears in a list or in someone else's report.

Latin Phrases

- e.g. *exemplis gratis* (singular) or *exempli gratia* (plural): for the sake of example; followed by a comma, it means "example(s) of the preceding" and is used to introduce a simple, in-text list.
- i.e. *id est*: that is; followed by a comma, it means "defines or is equivalent to the preceding" and is used to identify one thing or to introduce a short and complete list.
- et al. et alii: and others; replaces a list of co-authors in a reference citation.
- ca. *circa*: about; used with dates; but use \approx for approximate measurements.
- etc. et cetera: and so forth; do not use with e.g.; it is followed by a comma if the sentence continues.
- vs. versus: against.
- et seq. when referencing federal statutes.
- cf. This often-misused abbreviation does not mean see, see also, or but see. It indicates that a faunal or floral field specimen is close to but perhaps not identical to members of an established taxon. Lucas (1986) provides a detailed discussion on the use of cf. An acceptable use in archeological reports is to direct readers to compare two or more items for contrast or conflict.

Measurement Units

- Abbreviate or symbolize measurement units when they follow numbers.
- Abbreviations are not followed by periods unless they end a sentence.
- When using sq or superscript 2, pay close attention to whether you are expressing dimensions or area. For example, a 2-m-sq test unit is not the same as a 2-m² test unit.
- Use measurement abbreviations and symbols only with actual measurements; do not use forms such as: only a few g of datable material, several m west of the trench, under the last cm of silt.
- When specific temperatures are presented, use the degree symbol followed by C or F. When both are given, provide Celsius first with the Fahrenheit equivalent in parentheses, e.g., 22°C (72°F).
- Consult the list of measurement unit abbreviations on page 32.

Capitalization

Designations

• Specific designations are capitalized when particular examples of those designations are identified:

Test Unit 5	Burial 2	Transects A and B
Test Units 1–5	Feature 10	Historic Structure 8
Shovel Tests 11–29	Mound 97	Isolated Finds 15–18

• Designations are not capitalized when the reference is generic, even if a quantity is given:

Eighteen shovel tests were sterile.

The pedestrian inventory crew recorded 20 isolated finds.

The crew excavated five test units during the first field season.

Capitalization Examples from *American Antiquity*:

Upper Paleolithic period, late Holocene, Classic period, Koster site, Anasazi culture, Upper Republican aspect, Olmec horizon, Riverton phase, Denali complex, Clovis point, Cody knives, Hardin Barbed point, Salado polychromes.

Capitalization Examples from *Historical Archæology*:

Federal-period architecture, Raritan formation, American Southwest, southwestern United States, southeastern plantations, Washington State, Stadt Huys block, Dalton point, Ohio River.

National Park Service Terms

• Job titles, including acting assignments, are capitalized when used with someone's name:

We met with Superintendent Nelson and Chief Ranger Peterson in the visitor center.

• When used generically, job titles should be lowercased:

We met with the superintendent and the chief ranger to discuss alternatives.

• The same applies to terms that are sometimes part of a formal name and sometimes used generically:

fort	monument	campground	national park
park	historic site	visitor center	recreation area
trail	historical park	ranger station	historic structure

Figure Captions and List of Figures

A figure caption list and a separate List of Figures must be supplied. Rarely can a List of Figures be used directly as a source of captions.

Captions

- Each caption begins with 'Figure' followed by a number, a period, and the caption text.
- Indicate parts of a figure, such as individual artifacts, with lowercase letters in parentheses or with terms such as above, below, top, bottom, inset, left, or right in parentheses.
- Brief information should be enclosed in parentheses: (scale in cm).
- Lengthy information should stand as a separate text element even if it is not a complete sentence, beginning with a capital and ending with a period: Note the observation tower in left background. Photograph courtesy of the Smithsonian Institution.

In the List of Figures

- Each entry begins with the number followed by a period; don't repeat 'Figure.'
- Entries contain less detail than found in the corresponding captions. For example, the List of Figures uses only "Bifaces and projectile points," while the caption begins with "Bifaces and projectile points" and continues with the details for items (a), (b), (c), and so on.
- Information understood only in the context of the figure should be left out of the List of Figures, such as: Arrow in left foreground indicates hearth.

Footnotes and Endnotes in Text

- Refer to Part I for instructions on preparing footnotes and endnotes in draft submissions.
- Footnotes and endnotes in text are rarely needed (SAA 2003:31, §3.10; Hansen 1991:25). Most notes are easily converted to normal text and placed within the main discussion.
- An extensive note unsuited for conversion to normal text might better occur as an appendix.
- Superscripting and final note placement occur during a late stage of report production.
- Footnotes in tables are discussed as a separate topic, see *Tables*, page 19.

Gender Neutrality

- American Antiquity prohibits the use of male third-person pronouns and the generic 'man' in reference to non-sex-specific semantic categories.
- Avoid 'he' when sex is unknown and avoid 'he/she' as a substitute, which become tedious after just a few occurrences.

Problems with subject-verb agreement often develop when writing gender-neutral phrases. The following examples show how minor rephrasing avoids ungrammatical and politically incorrect sentences.

- © Grammatically correct but inappropriately gender-specific draft sentence:
 - A good archeologist always has his trowel with him at all times in the field.
- Typical but ungrammatical attempt at rephrasing:
 - A good archeologist always has their trowel with himself/herself at all times in the field.
- Short, grammatical, and politically correct:
 - Good archeologists always have their trowels when in the field.

Headings

- Do not create headings that go below the fifth level of embedding. For further discussion, click on **Enchancing Readability**, which includes a review of the uses and misuses of headings.
- Italics, bolding, centering, and other details are set at a late stage of report production. For instructions on how to show headings and levels of embedding in drafts, go to *Headings* (Part I), page 4.

Hyphenation

• Hyphenate words that function together as an adjective:

a 10,000-year period a 6- to 10-m-thick layer three 1-x-1-m test units a 3-m-deep trench one 6-mile-long transect ten 50-cm-deep shovel tests

- Examples from *American Antiquity* of permanent combinations that are now one-word compounds: preceramic, Postclassic, Paleoindian, Precolumbian, noncultural, infrastructure, intercommunity, intrasite, reanalyze, rockshelter.
- There are always exceptions—no hyphen before *cell*: short cell phytolith, long cell phytolith.
- Use hyphens in designation abbreviations: TU-4, IF-10, EU-1, ST-22.

Italics

Italics are applied throughout a report during a late stage of report production to:

- foreign words and phrases—most dictionaries list these in a foreign terms section;
- genus and species names, but not to sp. and spp. when following genus names in lieu of species;
- the names of ships, book titles, and names of journals;
- words, phrases, and selected sentences for emphasis;
- to et seq. when it occurs within a reference to a federal statute;
- sic within square brackets in a transcription to identify a mistake in the original material;
- but not to e.g., i.e., et al., ca., etc., and vs.

For readability considerations and instant recognition as special concepts, the Midwest Archeological Center italicizes:

- # in situ, in place
- ₱ a priori, at first, prior to experimentally derived information
- # terminus ante quem, limit before which, or end of a time period
- # terminus post quem, limit after which, or beginning of a time period

References Cited entries have the following elements in italics:

book titles titles of electronic documents

journal names titles of catalogs and reprinted catalogs

dissertation titles titles of Midwest Archeological Center reports

... but not a publication series name: Bulletin, Contribution, Memoir, Monograph, Papers, Report, Studies.

Numbers

Numbers are so often used for non-quantitative purposes that in many cases there is little functional distinction between numbers and letters. A field specimen number, a provenience unit number, and a date written into field notes all use numbers to relate non-quantitative information. One implication is that numbers often need special treatment to emphasize non-quantitative uses and for the sake of readability.

Cardinal Numbers

Generally

- Zero through nine are spelled out, while numbers above nine in text are written as arabic numerals.
- All numbers in tables are written as arabic numerals.
- Spell out multi-digit numbers that begin a sentence.
- Spell out non-specific numbers above nine, as in "The site covered several hundred square meters.

Exceptions

• Use arabic numerals for small numbers when there are many measurements, counts, and/or values above nine in a discussion.

• Numbers up to 100 should be spelled out when they precede unit modifiers:

twelve 6-inch guns two ¾-inch boards three 4-foot boulders seventy 55-gal. drums 120 8-inch boards 220 9-pound shells

'Half' and other spelled-out fractions should be changed to decimals when associated with specific measurements; e.g., use 'at each 0.5-m point' instead of 'at each half-meter point' except in quotations. On the other hand, ratio-style fractions ($\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$) are sometimes appropriate; refer to **Other Numbers**, page **15**. Use arabic numerals for single-digit numbers when fractions are employed, e.g., $1\frac{3}{4}$ or $4\frac{1}{2}$, not 'one and $\frac{3}{4}$ ' or 'four and $\frac{1}{2}$.'

Ordinal Numbers

- American Antiquity prefers ordinal numbers—first, second, third, etc.—spelled out in text.
- *Historical Archæology* requires all centuries to be written as arabic numerals in text except in quoted material, e.g., artifacts dating to the 17th century, mid-18th-century artifacts.
- When variation occurs in a draft report, editing defaults to *American Antiquity* rules.

Dates and Years

- Spell out months, but not the strictly numerical components of calendar dates, e.g., March 10, 1813. Exceptions are dates in quotations, publication titles, and other transcribed text.
- Write decades with no apostrophe, e.g., the 1870s.
- Year spans are written as arabic numerals with both components given in full, e.g., 1550–1650.
- Do not place commas in year-only dates except when there are five or more digits, e.g., AD 1500; 5500 BC; 9000 BP; 11,500 BC, the sample dated to 2750 ± 70 BP.
- Note the lack of periods in AD, BC, BP, and RCYBP. AD precedes the digits; BC, BP, and RCYBP follow the digits.
- Place commas in quantities of years between the hundreds' and thousands' place, e.g., about 7,500 years ago; warming began 1,500 years later; a period lasting at least 3,000 years.

Site Numbers

- Use Smithsonian Trinomial System (STS) site numbers unless an alternative system applies to the region *and* is the standard, e.g., Arizona, Canada.
- Use only capital letters for the county designation; do not use hyphens or spaces to separate components of the trinomial, e.g., 23SL765 designates White Haven, Grant's home in Missouri.
- Some states have different notions about spaces, hyphens, and capitalization in STS numbers, which may be applied when supported by an authoritative guideline.
- When a site or structure has a name and a number, introduce both but do not use both continuously throughout the report—pick either the name or the number to be used as the standard referent.

Designations

- Use arabic numerals for numbers in designations such as test pits, features, mounds, trenches, burials, photographic film rolls, published volumes, and similar components of archeological fieldwork and reporting. Refer to the examples appearing under *Capitalization*, page 11.
- Exceptions might occur in quoted material and transcriptions; always follow the original format.
- Hyphens and abbreviated designations are covered under *Hyphenation*, page 13.
- Use 'No.' or 'Number' only when part of a traditional identification system: a No. 2 pencil, 12 feet of No. 22 copper wire, a self-addressed No. 10 envelope, one ton of No. 9 coal, and two No. 1 Tall cans.
- Never use # as a substitute for 'No.' or 'number.' Use # only in quoted and transcribed material.

Statistical Expressions

- Example: $\chi^2 = 32.5$; df = 3; p < .05
- Insert spaces on both sides of an equal sign.
- Do not use leading zeros in decimals indicating significance level, for example p < .10.
- Separate terms in a string of related statistics with semicolons.

Leading Zeroes

- When expressing decimals less than one in text, use leading zeros, e.g., two tenths or 'point two' is represented as 0.2 instead of .2.
- Use leading zeros in tables and graphs.
- Exception: don't use leading zeroes in statistical expressions, such as in significance level, p < .15.

Other Numbers

- Spell out terms such as half, quarter, one-half, one-quarter when they occur by themselves as descriptions or quantities.
- Use fraction symbols when they occur as parts of larger numbers (8½) and in legal land descriptions (NW¼ of the SW¼ ...).
- Use arabic numerals in legal land descriptions to designate section, range, and township.
- Choose between such formats as "ten-penny nail" or "10d nail" and use the same throughout.

Passive Voice

- Use active verbs and active-voice constructions.
- Re-write passive voice sentences, which commonly appear in drafts.

Passive: Eighteen new sites were recorded and five previously documented sites were relocated during the first field season by the Midwest Archeological Center field crew.

Active: During the first field season, the Midwest Archeological Center field crew recorded 18 new sites and relocated 5 previously documented sites.

- Do not use passive verbs in National Register of Historic Places eligibility statements (page 18), where it is important to identify who has nominated, determined, or recommended something.
- Do not use a passive verb to avoid a first-person statement, which uses 'I' or 'we.' Unless they are overused, first-person statements do not constitute bad writing, and they can often help clarify.

Punctuation

Apostrophe

• An apostrophe normally indicates possession:

The park's maintenance crew cheerfully participated in the Center's site survey.

- The lack of apostrophe in its is an exception; note that it's is a contraction of it is.
- Do not use apostrophes in most year designations, abbreviation plurals, and acronym plurals: during the 1970s and 1980s, a total of 16 TUs, two GMPs, most URLs
- Use an apostrophe after the 's' with a plural noun to indicate possession:

These guidelines addresses MWAC authors' concerns.

• The following cases of maker and mark are from the *Historical Archæology* style guide:

maker's mark = one maker, one mark

maker's marks = one maker, more than one mark

makers' marks = more than one maker, more than one mark.

Brackets

The four main functions of square brackets are:

- (1) in text to indicate information added to the work of another writer, including editorial interpolations, corrections, explanations, translations, and comments;
- (2) in a reference to indicate information not on the title page of a publication or manuscript;
- (3) in any context to replace parentheses that would otherwise occur within parentheses, e.g., to enclose a reference citation occurring inside a parenthetical phrase or sentence; and
- (4) in mathematics as one of several signs of aggregation to indicate the order of operations within an expression or equation, such as $[(x + y)^2 z]$. Signs of aggregation work from the inside out starting with parentheses.

In addition to (2), the Midwest Archeological Center uses square brackets in some References Cited entries describing sources obtained from the Internet. Refer to **Citing Internet Sources** for examples.

Embossments and Inscriptions

- Use the original pattern of uppercase and lowercase.
- Use square brackets to enclose inferred elements.
- Use an ellipsis (three periods) to indicate a missing element or group of missing elements.
- Do not set the transcription in quotation marks. Instead, use a slash to indicate an original line end, including the original beginning and ending points.
- Include a space on each side of each slash. These examples are from Midwest Archeological Center reports; some are slightly modified:

```
/ ... HOVA ... / glass bottle embossment, YELL 48YE14
/ W.R.A. Co. / .41 L.D.A. / cartridge case headstamp, WICR Ray House
/ MADE / IN / USA / 900 / WB / spoon backstamp, FOLS Cavalry Barracks
/ BOTTLED BY / AMBROSE / & COMPANY / wine bottle embossment, WICR Ray House
```

- For complex trademarks, makers' marks, and insignia unsuitable for ordinary transcription, either:
 - (a) present significant marks as illustrations, or
 - (b) describe significant elements and arrangements rather than transcribe them, as in this example from the WICR Ray House wine bottle noted just above:

The base bears the symbol of the Owens Illinois Glass Company, i.e., a horizontal 'diamond' superimposed on an 'I' inside an 'O.' Surrounding the trademark are the numbers '7,' '2,' and '6' indicating ... the plant where the bottle was fabricated, the year date (which in this case was 1931—year dating began in 1930), and mold details.

Parentheses

Good uses include:

- reference citations
- acronym introductions
- enclosing numbers in lists
- figure and table references
- species names after common names
- enclosing lowercase letters in figure captions

Do not use parentheses for full phrases, extended comments, and sentences. Instead,

- Short comments should be set off by commas.
- Extensive comments should be made into separate sentences.

Quotation Marks

- In text, use double quotation marks to enclose short quotations included as part of a paragraph.
- Do not use quotation marks for a quotation separated from normal paragraphs as an indented block.
- Generally, a quotation running more than one line of an indented block, about 17 words or roughly 105 characters including spaces, should be set apart from adjacent text. Obtain word and character counts by selecting the quotation, then choose Tools > Word Count.
- In a References Cited entry, double quotation marks are used to enclose the document title transcribed from an online or Internet reference source. For details, refer to **Citing Internet Sources**.

Serial Comma

• Use a comma before the conjunction in a simple series of three or more items.

With a serial comma: The primary colors are red, yellow, and blue. Without serial comma: The primary colors are red, yellow and blue.

• In a complex series, use semicolons as the main separators and commas as the secondary separators. Note that the middle term in the example below—blue, green, and yellow—is itself a series requiring a comma:

The tapestries had green and gold; blue, green, and yellow; and red and black designs.

Slash

The Chicago Manual of Style recognizes six legitimate uses of the slash:

- (1) to indicate a period extending more than one calendar year, e.g., winter 1921/22;
- (2) and/or;
- (3) to indicate alternate spellings, e.g., Hercules/Heracles;
- (4) In fractions, ratios, and mathematical equations;
- (5) to mark the original end of a transcribed line of text as it appears in the original; and
- (6) to mean 'per' in some abbreviations, e.g., km/h.

The Midwest Archeological Center adds:

- (7) as punctuation in Internet addresses and
- (8) as coordinate separators in site grid notation.

The four most common uses in Midwest Archeological Center technical reports are:

- ➤ Slash as Line End Marker. A slash marks the original end of a line of transcribed text, from graffiti to glass bottles to carved stone monuments. Here is an embossment on a glass jar from 48YE59, Yellowstone National Park: / DESIGN / PATENTED / 3 / AUG 5TH 1919 /. Note the spaces on either side of the slash. Other examples occur in the Embossments and Inscriptions discussion under *Punctuation* on page 16.
- ➤ Slash in Ratios. Use a slash to separate the terms of a ratio. For example, radiocarbon date discussions often include ¹³C/¹²C values. In equations, a slash means 'divided by.' If a formula or equation occurs within a line of text, a slash should the separate terms instead of a horizontal bar or ÷.
- ➤ Slash in Internet Addresses. Slashes and backslashes often occur within Internet addresses for online references listed in the References Cited. Note that <angle brackets>, not slashes, serve to enclose an Internet address, whether or not slashes occur in the address.
- ➤ Slash in Grid Notation. When grid coordinates are combined to identify a geographic reference point, the two parts of the grid specification should be separated by a slash: E55/N110.

Radiocarbon Ages and Dates

- Age refers to an uncalibrated laboratory result expressed in conventional radiocarbon years BP.
- Date refers to the Gregorian calendar equivalent expressed in calibrated years AD or BC.
- Sigma, or the standard deviation (σ), is not an "error factor."

Laboratory error, standard error, and standard deviation are all involved in radiocarbon analysis, but they are not synonymous; use these terms in their proper contexts. A standard deviation is based on count rate statistics only and is required for basic reporting and for calibration with CALIB, whereas laboratory error is an optional factor used in calibration and not usually included in an archeologist's report of laboratory and calibration results (Stuiver et al. 2000:§1.3.3).

Required: Age and Sample Details

- Include the sample identification number assigned by the laboratory.
- State the material dated, such as corn cob, wood charcoal, bone apatite, blood residue, or pollen.
- Give the uncalibrated conventional radiocarbon age and sigma first.

The radiocarbon age must be based on the 5568-year half-life. If conversion is necessary, use the 5730-to-5568 conversion factor of 1.0291 to convert a 5730 age. The uncalibrated age is expressed as years BP (0 BP = AD 1950). State whether the laboratory corrected for isotope fractionation and, if so, provide the δ^{13} C measurement or the laboratory estimate.

Optional: Date and Calibration Details

- A Gregorian calendar date equivalent for a radiocarbon age is obtained by entering the conventional radiocarbon age into a calibration program such as CALIB (Stuiver and Reimer 1993).
- The Midwest Archeological Center neither requires nor prohibits the conventions "cal AD" and "cal BC," which emphasize the restricted meaning of *date* noted above.
- American Antiquity provides an example of a first-time report of a radiocarbon age and date: 3680 ± 60 BP (Pta-3964; wood charcoal; $\delta^{13}C = -23.8\%$); date ranges are 2279–2232 cal BC (p = .05) and 2209–1905 cal BC (p = .95) when calibrated at two sigma (2 σ) with CALIB 2.0.

Fractionation and Calibration

Beta Analytic uses the 5568-year half-life and routinely makes an isotope fractionation correction using a direct measurement or an estimate of the ratio of ¹³C to ¹²C. In fact, most laboratories correct for isotope fractionation in any "conventional radiocarbon age." When calibrating a *conventional* radiocarbon age with CALIB or a similar program, therefore, do not choose the option to correct for isotope fractionation. This has already been done, and doing it again during calibration will produce significant errors.

A few laboratories have different sample processing and reporting standards and do not take δ^{13} C into account; they might report simply a "radiocarbon age." If no such correction has been made, then the phrase " δ^{13} C undetermined" should be substituted for the isotope fractionation data given with the other required age and sample details, as discussed above. When calibrating with a computer, choose the option to correct for isotope fractionation. For more on this topic, refer to SAA (1999:§3.3.5), Stuiver and Reimer (1993), and Stuiver et al. (2000).

Special Usages

Archeology and Archæology

- The standard Federal Government spelling is archeology, which is also preferred by the American Anthropological Association.
- Midwest Archeological Center employees and contractors must use the Federal Government spelling in original phrases and sentences, i.e., those written by the author.
- Follow the original spelling in quoted material, in organization names, in titles of cited reports and articles, and in the names of publication series.
- Authors and editors should not "correct" the $-\alpha$ spelling to conform to the government spelling in text not written by the Midwest Archeological Center author.

Historic and Historical

- *Historic* describes tangible things and specific places. Place, building, property, structure, and fabric are all tangible and specific. Historic preservation refers to the preservation of historic things. Phrases used in cultural resource management include: historic building fabric, historic structure, Historic American Buildings Survey, national historic site, National Register of Historic Places.
- *Historical* describes concepts and entities, such as historical society, historical archeology, historical significance, and historical development.
- The National Park Service distinguishes between a national historical park and a national historic site. The implication is that a park has broader significance than a site. Here, *park* is used in the specific sense, not the expanded one explained below under **Park**, page 19.

National Register Eligibility Statements

Archeologists are often required to make preliminary or provisional assessments as to whether a site might qualify for listing on the National Register of Historic Places (NRHP). Unfortunately, there is far too much variation in the phrasing of such assessments. Terms such as recommended, nomination, eligible, potentially, and determined are often combined in misleading, ambiguous, or incorrect ways.

- It is important to use "determination" or "determined" very carefully in order to convey the correct information about the status of a site and what stage has actually been reached in the NRHP process.
- Be careful with "nomination" and "nominated"—phrases such as "has been nominated" and "is eligible for nomination" are often misused and, at best, are not fully informative.
- Some states have their own determination process, the results of which remain subject to evaluation by the Keeper of the Register and the NRHP staff. In such cases, it might also be correct to say something to the effect that a determination has been made at the state rather than the federal level.
- The Keeper of the Register and a few state historic preservation authorities are the only entities who can make a *determination*. Do not use "determined" or "determination" to describe any other action, opinion, judgement, status, or finding.

Even if a formal Determination of Eligibility pertains to the site you are describing, do not use constructions such as "The site has been determined eligible for inclusion on the National Register" or "This site is recommended as eligible." These use the passive voice, which does not require identification of who determined or recommended. Refer to page 15 for more on the topic of passive and active verbs.

It should be stated clearly when the author of a report is offering an eligibility opinion. Here is a satisfactory statement for situations that Midwest Archeological Center authors might encounter when reporting the results of fieldwork:

Our fieldwork shows [or, On the basis of this fieldwork, I believe] that this site fulfills the requirements for inclusion on the National Register of Historic Places.

Park

The National Park Service uses *park* in a sense not found in dictionaries. *Park* often means any NPS field area, not just a unit with "Park" in the designation (National Park Service 1991:7). There are many kinds of NPS units or field areas. *Park Designations* are listed on page 26.

When park is used in the expanded sense to mean any type of field area, it contrasts with regional and support offices, training centers, archeological centers, service centers, and other NPS facilities that serve administrative and support functions rather than having one or more resources to protect and interpret.

This expanded NPS definition of park is necessary in generalized statements such as, "There are now over 380 parks open to the public and administered by the National Park Service" even though the majority are not specifically designated as national parks.

It should not be necessary to explain this use of park in a document prepared for NPS readers. When writing for a non-NPS readership, however, or if there is no pressing need to use park in the expanded sense, it is better to avoid the term altogether and find an alternative that requires no explanation, such as "NPS field areas" or "field units of the National Park Service."

Tables

- Each table must be numbered sequentially with arabic numerals and cited in order in the text beginning with Table 1. Tables may be cited in groups and in other tables.
- Each table must have a short title, which should not provide background details or describe the conclusions one might draw from the table.
- Use normal uppercase and lowercase for the title, but use initial capital letters on major words in the column headings.
- Leave 'Table' out of each entry in the List of Tables; instead, begin each List of Tables entry with the table number followed by a period. Entries in the List of Tables may have shortened titles.
- There should be no reference citations in the table title. Data source notes and reference citations must be placed in footnotes at the end of the table, as explained below on page 21.

Table Types

Summary Tables. Information spread out over several chapters is gathered into one table for quick reference and to summarize certain kinds of results. For example, this kind of table might have column headings for site number and site size; types of fieldwork activities, such as mapping, surface collection, or excavation; feature numbers and types; dating; and national register status.

The same information appears in the report text, but it is scattered across many pages and perhaps several chapters. The table allows a user to quickly locate all of a particular kind of information without having to flip through many pages of text to pick out bits and pieces from the body of the report. A summary table concentrates essential information in one place, i.e., repetition for convenience.

Supporting Expansion. The second basic type of table expands on and supports an inference or conclusion given in the report body. This kind of table contains details that a critical reader needs to evaluate an inference or conclusion given elsewhere. It provides the basic data, the results of an analysis, or both.

Tables in this category vary tremendously in complexity. If a table is highly complex, the author should at least consider breaking the table up into smaller, less complex, more manageable portions.

Tables must not simply present numerical repetitions of simple observations stated in the text. That is, do not use a table to repeat a statement given in the text such as, "Fifteen projectile points were recovered from Feature 3 (Table 18)," when the cited table merely lists the counts and totals for various artifact classes, numbers of complete and incomplete specimens, and so on. In this example, no conclusion or inference is drawn from the data—one descriptive statement merely appears in two forms.

The supporting expansion table should contain at least some information not found anywhere else while providing the basis for a statement that makes use of the table's implications. The following example cites a hypothetical supporting expansion table.

As demonstrated in Table 11, storage pit volume decreases through time while frequency increases, with no significant net change through time in total available storage volume, suggesting a constriction of the size of food-sharing groups without a noticeable change in population numbers or density.

Inventory for Documentation. The third basic type of table is an inventory of artifacts or results not presented in detail in the text and not necessarily discussed in detail in the report. The kind of results appearing in an inventory table depends on the nature of the project. For example, an artifact collection from a study area might not support new conclusions about the area's prehistory or history. The information is basic documentation of NPS activities as required by park policy and federal regulations. This type of table might not be cited in the text in support of any particular inference; rather, it is part of the collection description and is required for basic documentation.

This third type of table is often appropriate as an appendix. Table length is not the main criterion for whether it is appendix material. The major factor to consider is whether a data set is presented for the most basic documentation purposes or whether it is for immediate reader reference in support of a specific point made in the text. If it serves only as basic documentation, then it should probably be contained in an appendix.

It is not necessary to include all data sets and all research materials produced during a project. Many data sets are important for research in general and yet not within the reader's interests or needs. If the information presented in an inventory for documentation does not need to be examined by the reader to understand or use the report, then cite the data on file or archived, or indicate some other way that the data can be located.

Table Layout and Organization

Like elements should read down, not across. Often, the "like elements" are artifact types or similar categories, and the cell entries are counts or similar quantities. The preferred layout organizes values into columns that can be summed, i.e., the counts are read down. A table might also have meaningful row totals or subtotals.

If there are two or more tables that present parallel information—for example, counts of the same kinds of ceramics from several historic structures, with each structure represented by its own table—then the column headings in one table should not appear as row titles in one of the other matching tables.

Table Footnotes

- Information that applies to an entire table is placed in a general note at the end of the table.
- Information restricted to a part of a table should be placed in a column or row footnote.
- Arrange footnotes, with each one beginning on its own line, in the following order:
 - ¹ general notes, which are indicated by superscripted numbers
 - ^a specific notes, which are indicated by superscripted lowercase letters
 - * statistical significance notes, which are indicated by asterisks
- The title of a table does not carry footnotes or reference citations.
- The only footnotes in a technical report should be those in tables. Consult Part I for instructions on how to prepare footnotes for draft submission.

Footnotes are not limited to short numerical items or reference citations. There may be essential information that, for any of a number of reasons, does not fit well in the main text, does not constitute a main entry in an existing table, and would not be suitable as material for a separate table. Placing essential information in an extensive table footnote may be an excellent alternative to placing it in the main text.

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Part III: Reference Materials

Spelling Guide

aboveground ground stone power plant acknowledgments ground-stone artifacts (adj.) pre-Basketmaker Agency gunflints preceramic archeology (review usage, page 18) gunshot wound precontact AutoCAD half-life predate backcountry hand-painted bowl, jar, etc. Presidential Proclamation baseline heat-treated silicates push-pull basemap hollowware reanalyze belowground hunter-gatherer reconnaissance beltcourse re-create 4 icecap bird's-eve view Internet redware interagency buffware Regionwide re-use builder's trench intersite build-up intranet roadbed butt plate roadcut intrasite campsite rockshelter krotovina cast iron labeled room block cast-iron (as adjective) lab work rough-cut stone catalog lens row house Servicewide centerline lipping tool finish chi-square loess short cell phytolith long cell phytolith concessionaire shovel test concrete block main line side-gable roof maker, with mark, go to page 15 concrete-block base sidescraper microwear cord-marked slope wash (as noun and adjective) cord-wrapped stick-impressed minié ball statewide or Statewide myriad (use only as adjective 3) cord-wrapped-stick impressions storefront courthouse nationwide stoneware co-vary noncultural thin-sectioned cross section (noun) non-federal timberline cross-section (verb 1) nonetheless toolstone cultural ecology nonlocal trademark cultural-historical nonspecific trade name culture history (not cultural history) obsidian-hydration dating trailhead transfer print cutbank offsite database ongoing transfer-printed sherd dBASE online treefall Departmentwide onsite tree line dry-screened overstory stoneware email 2 Paleoindian understory ear spool parkwide use life eolian (not æolian) part-time use wear photograph (not photo) enamelware use-wear analysis piece-plotted endscraper vis-à-vis pinflag Euroamerican visitor center (more on page 11) Eurocanadian pithouse vitrophyre federal (but, Federal Government) pit structure water line field crew plainware Web site field house plowzone whiteware field notes postcontact wickiup field school postdate word processing, processor postdepositional fieldwork workforce filename postglacial workload fire-cracked rock posthole workplan flat glass posthole fill World Wide Web floodplain posthole digger X ray (noun) post bottom mold x-ray (verb, adjective) gray (not grey) post mold yearend pothole yellowware

powerhouse

ziplock = zipper-seal

¹ cross-sectioned (adj. and verb).

² although the hyphenated form is common, the unhyphenated form is preferred.

³ as in "the myriad stars above."

⁴ create again or restore.

Common Acronyms

Agencies and Organizations

Advisory Council on Underwater Archæology	ACUA
Agriculture Department	USDA
American Anthropological Association	AAA
Bureau of American Ethnology	BAE
Bureau of Indian Affairs	BIA
Bureau of Land Management	BLM
Corps of Engineers (U.S. Army)	COE
Department of Agriculture	USDA
Department of the Army	DOA
Department of Defense	DoD
Department of the Interior	USDI or DOI
Department of Transportation	DOT
Environmental Protection Agency	EPA
Federal Housing Administration	FHA
Federal Highway Administration	FHWA
Federal Law Enforcement Training Center	OFIE or FLETC
Fish and Wildlife Service	FWS
Forest Service	USFS
Government Printing Office	GPO
General Services Administration	GSA
Interagency Archeological Salvage Program	IASP
Interior Department	USDI or DOI
Library of Congress	LC
National Archives and Records Administration	NARA
National Bureau of Standards (obsolete, use NIST)	NBS
National Cemetery System	NCS
National Historical Publications and Records Commission	NHPRC
National Park Service	NPS
National Institute of Standards and Technology (replaces NBS)	NIST
National Science Foundation	NSF
National Technical Information Service (Commerce Department)	NTIS
Natural Resources Conservation Service (replaces SCS)	NRCS
Nebraska Association of Professional Archæologists	NAPA
River Basin Surveys	RBS
Register of Professional Archeologists	ROPA
Smithsonian Institution	
Society for American Archæology	SAA
Society for Historical Archæology	
Society of Professional Archæologists	
Soil Conservation Service (obsolete, use NRCS)	
State Historic Preservation Office	

United Nations	IIN
United States Air Force	
United States Department of Agriculture	
United States Department of the Interior	
United States Forest Service	
United States Geological Survey	
United States Marine Corps	
United States Navy	
Veterans Affairs, Department of	
Youth Conservation Corps	
•	
Technical Terms and Phrases	
above mean sea level	amsl or AMSL
absolute pollen frequency	APF
accelerator mass spectrometry	AMS
arboreal pollen	AP
Celsius	C
centimeters below datum	cmbd
centimeters below surface	cmbs
cross section	XS
cryptocrystalline silicates	CCS
effective hydration temperature	EHT
electronic distance measurement	EDM
estimated number of fragments	EF
estimated minimum number of individuals	EMNI
excavation unit	EU, XU, and X
Fahrenheit	F
field specimen	FS
fire-cracked rock	FCR
Geographic Information System	GIS
Global Positioning System	GPS
million years ago	
minimum number of individuals	MNI
multiple artifact cluster	MAC
non-arboreal pollen	NAP
number of identified specimens	NISP
Precision Lightweight GPS Receiver	PLGR
present ground surface	PGS
radiocarbon years before present	
Smithsonian Trinomial System	
test unit	
thousand years ago	KYA or Ka
Universal Transverse Mercator	
x-ray fluorescence	xrf or XRF

Legislation and Policy

Archeological Resources Protection Act	ARPA
Code of Federal Regulations	CFR
Contracting Officer's Representative	COR
Contracting Officer's Technical Representative	COTR
Cooperative Agreement	CA
Cultural Sites Inventory	CSI
Design Concept Plan	DCP
Determination of Eligibility	DOE
Executive Order	EO
Federal Register	FR
Fiscal Year	FY
full-time equivalency	FTE
General Management Plan	GMP
Historic Structure	HS
Interagency Agreement	IA
Job Training Partnership Act	JTPA
Memorandum of Agreement	MOA
Memorandum of Understanding	MOU
National Historic Preservation Act	NHPA
National Register of Historic Places	NRHP
Native American Graves Protection and Repatriation Act	NAGPRA
Public Law	P.L.
reservation of use and occupancy	RUO
Resource Management Plan	RMP
right-of-way	ROW
Scope of Work	SOW
United States Code	U.S.C.
Volunteers In Parks	VIP
Other — General	
file transfer protocol	FTP
gunshot wound	GSW
hypertext markup language	HTML
local area network	LAN
optical character recognition (or, reader)	OCR
portable document format	PDF
request for proposals	RFP
rich text format	RTF
uniform resource locator	URL
wide area network	WAN
World Wide Web	WWW

Park Designations

IHS	International Historic Site
NB	
NBP	National Battlefield Park
NBS	
NHP	National Historical Park
NHP and PRES	
NH RES	
NHS	
NL	
NM	
NM and PRES	
NMP	National Military Park
N MEM	National Memorial
NP	National Park
NP and PRES	
N PRES	
NR	
NRA	
NRR	
NRRA	
N RES	
NS	
NSR	
NST	National Scenic Trail
PKWY	Parkway
SRR	Scenic and Recreational River
WR	Wild River
WSR	Wild and Scenic River

Park and Office Acronyms

ABLI	Abraham Lincoln Birthplace NHS	ВОНА	Boston Harbor Islands NRA
ACAD	Acadia NP	BOSO	Boston Support Office
ADAM	Adams NHS	BOST	Boston NHS
AGFO	Agate Fossil Beds NM	BOWA	Booker T. Washington NM
AKRO	Alaska Regional Office	BRCA	Bryce Canyon NP
AKSO		BRCR	Brices Cross Roads National Battlefield Site
ALAG	Alagnak Wild River	BRVB	Brown v. Board of Education NHS
ALFL		BUFF	Buffalo NR
ALPO	Allegheny Portage Railroad NHS	BUIS	Buck Island Reef NM
AMIS	Amistad NRA	CABR	
AMME		CACH	
ANCHA	Alaska Public Lands Information Center, Anchorage	CACL	
ANDE		CACO	
ANIA		CAGR	
ANJO		CAHA	
ANTC		CAKR	
ANTI		CALI	
APCO	Appomattox Court House NHP	CALO	
APIS	Apostle Islands NL	CANA	
APPA	Appalachian NST Land Acquisition Office	CANY	
APPA	Appalachian NST	CARE	
ARCH	Arches NP	CARI	
ARHO	Arlington House, The Robert E. Lee Memorial	CARL	
ARPO	Arkansas Post NM	CASA	
ASIS		CATO	
AZRU		CAVE	
BADL	Badlands NP	CAVO	
BAND	Bandelier NM	CCSO	Columbia Cascades Support Office
BAWA	Baltimore-Washington PKWY	CEBR	
BEFR	Benjamin Franklin NM	CHAM	
BELA	Bering Land Bridge N PRES	CHAT	
BEOL	Bent's Old Fort NHS	CHCH	Chickamauga and Chattanooga NMP
BIBE	Big Bend NP	CHCU	
BICA	Bighorn Canyon NRA	CHIC	
BICY	Big Cypress N PRES	CHIR	Chiricahua NM
BIHO	Big Hole NB	CHIS	
BISC	Biscayne NP	СНОН	
BISO	Big South Fork NRRA	CHPI	
BITH	Big Thicket N PRES	CHPO	
	lackstone River Valley National Historic Cemetery	CHRI	
	Black Canyon of the Gunnison NM	CHSC	
	Blue Ridge PKWY		City of Rocks N RES
	Bluestone NSR		
BOAF	Boston African-American NHS	CMCO	Claude Moore Colonial Farm

CODA	Lake Roosevelt NRA	FOCA	Fort Caroline NM
COLM	Colorado NM	FOCL	Fort Clatsop NM
COLO		FODA	Fort Davis NHS
CORO		FODC	
COSW		FODO	
COWP		FOFR	Fort Frederica NM
CRLA		FOLA	Fort Laramie NHS
CRMO	Craters of the Moon NHP	FOLS	Fort Larned NHS
CUGA	Cumberland Gap NHP	FOMA	Fort Matanzas NM
CUIS		FOMC	Fort McHenry NM and Historical Shrine
CURE		FONE	
CUVA	Cuyahoga Valley NRA	FOPO	Fort Point NHS
DAAV	Dayton Aviation Heritage NHP	FOPU	Fort Pulaski NM
DABE	David Berger N MEM	FORA	Fort Raleigh NHS
DELA	Delaware NSR	FOSC	
DELE	Delaware and Lehigh National Heritage Corridor	FOSM	Fort Smith NHS
DENA	Denali NP and Preserve	FOST	Fort Stanwix NM
DEPO	Devils Postpile NM	FOSU	Fort Sumter NM
DESO	De Soto N MEM	FOTH	Ford's Theatre NHS
DETO	Devils Tower NM	FOUN	Fort Union NM
DEVA	Death Valley NP	FOUS	Fort Union Trading Post NHS
DEWA	Delaware Water Gap NRA	FOVA	
DINO	Dinosaur NM	FOWA	Fort Washington Park
DRTO	Dry Tortugas NP	FRDO	Frederick Douglass NHS
DSC			Fredericksburg National Cemetery
EBLA	Ebey's Landing NH Reserve	FRHI	Friendship Hill NHS
EDAL	Edgar Allan Poe NHS	FRLA	Frederick Law Olmsted NHS
EDIS	Edison NHS	FRSP	Fredericksburg and Spotsylvania NMP
EFMO	Effigy Mounds NM	GAAR	
EISE	Eisenhower NHS	GARI	Gauley River NRA
ELIS	Ellis Island	GATE	Gateway NRA
ELMA	El Malpais NM	GEGR	General Grant NM
ELMO	El Morro NM	GERO	George Rogers Clark NHP
ELRO	Eleanor Roosevelt NHS		Gettysburg National Cemetery
EUON	Eugene O'Neill NHS	GETT	Gettysburg NMP
	Everglades NP		George Washington Birthplace NM
	Alaska Public Lands Information Center, Fairbanks		Gila Cliff Dwellings NM
FAMA	Father Marquette NM		Glacier NP
FARM	Farmington Wild and Scenic River		Glacier Bay NP and PRES
FEHA	Federal Hall NM	GLCA	Glen Canyon NRA
FILA	First Ladies NHS	GLDE	Gloria Dei (Old Swedes) Church NHS
	Fire Island NS		Glen Echo Park
	Flagstaff Area Group Office	GLOR	Glorieta Battlefield
	Florissant Fossil Beds NM	GOGA	
	Fort Bowie NHS		
	Fossil Butte NM		Great Basin NP

GRCA	Grand Canyon NP	JECA	Jewel Cave NM
GREE	Greenbelt Park	JEFF	Jefferson National Expansion Memorial
GRFA	Great Falls Park	JEFM	Thomas Jefferson Memorial
GRKO	Grant-Kohrs Ranch NHS	JELA	Jean Lafitte NHP and PRES
GRON	Great Onyx Job Corps Civilian Conservation Center	JICA	
GRPO	Grand Portage NM	JODA	John Day Fossil Beds NM
GRSA	Great Sand Dunes NM	JODR	John D. Rockefeller Jr. Memorial PKWY
GRSM	Great Smoky Mountains NP	JOFI	John Fitzgerald Kennedy NHS
GRSP	Green Springs Historic District	JOFL	Johnstown Flood N MEM
GRTE	Grand Teton NP	JOMU	John Muir NHS
GUCO	Guilford Courthouse NMP	JOTR	Joshua Tree NP
GUIS	Gulf Islands NS	KAHO	Kaloko-Honokohau NHP
GUMO	Guadalupe Mountains NP	KALA	Kalaupapa NHP
GWCA	George Washington Carver NM	KATM	Katmai NP and PRES
GWMP	George Washington Memorial PKWY	KEFJ	Kenai Fjords NP
HAFE		KEMO	
HAFO	Hagerman Fossil Beds NM	KEWE	
HAGR	Hamilton Grange NM	KICA	Kings Canyon NP
HALE	Haleakala NP	KIMO	Kings Mountain NMP
HAMP			Klondike Gold Rush NHP
HAVO	Hawaii Volcanoes NP	KLSE	Klondike Gold Rush, Seattle Unit
	Herbert Hoover NHS		Knife River Indian Village NHS
HFC	Harpers Ferry Center		Kobuk Valley NP
	Harpers Ferry Job Corps Civilian Conservation Center		Lava Beds NM
	ALTR Horace M. Albright Training Center	LACH	Lake Chelan NRA
		LACL	Lake Clark NP and PRES
HOCU		LAME	Lake Mead NRA
HOFU	Hopewell Furnace NHS		Lake Meredith NRA
HOME	Homestead NM of America	LAVO	Lassen Volcanic NP
HOSP	Hot Springs NP	LBME	LBJ Memorial Grove on the Potomac
HOVE	Hovenweep NM	LECL	Lewis and Clark NHT
HSTR	Harry S Truman NHS	LIBI	Little Bighorn Battlefield NM
HUTR	Hubbell Trading Post NHS	LIBO	Lincoln Boyhood NM
	Ice Age NST	LIHO	Lincoln Home NHS
ICAG	Ice Age National Scientific Reserve	LINC	Lincoln Memorial
ICRC	Intermountain Cultural Resource Center	LIRI	Little River Canyon N PRES
ILMI	Illinois and Michigan Canal National Heritage Corridor		Long Distance Trails Group, Santa Fe
IMDE		LODT	Long Distance Trails Group, Salt Lake City
	Intermountain Regional Office	LONG	Longfellow NHS
IMSF	Santa Fe Support Office	LOWE	Lowell NHP
	Independence NHP	LYJO	Lyndon B. Johnson NHP
	Indiana Dunes NL		
	Isle Royale NP		Marsh-Billings NHP
	James A. Garfield NHS		
	Jamestown NHS		Martin Luther King Jr NHS
			Manassas NBP

MARS	Museum and Archeological Research	NOATNoatak N PRES
MASI		NOCA
MAVA	Martin Van Buren NHS	NOCONorth Country NST
MAWA	Maggie L Walker NHS	[none]Great Egg Harbor Scenic and RR
MCHO	McLoughlin House NHS	[none]Pinelands Commission N RES
MEAF	US–Mexico Affairs Office	NPS, WASO National Park Service Headquarters
MEVE	Mesa Verde NP	NPSA National Park of American Samoa
MIMA		NRLONew River Gorge Land Acquisition Field Office
MIMI	Minuteman Missile NHS	NWAK
	Mississippi NRRA	OBRI Obed Wild and Scenic River
MMBC	Mary McLeod Bethune Council House NHS	OCJO Oconaluftee Job Corps Civilian Conservation Center
MNRR	Missouri NRA	OCMUOcmulgee NM
MOCA	Montezuma Castle NM	OFLE, FLETC Federal Law Enforcement Training Center
MOCR	Moores Creek NB	OLYMOlympic NP
MOJA	Mojave N PRES	OPOTOld Post Office Observation Tower
MONO	Monocacy NB	ORCAOregon Caves NM
MOPI	Mormon Pioneer NHT	OREGOregon NHT
MORA	Mount Rainier NP	ORPIOrgan Pipe Cactus NM
MORR		OVVIOvermountain Victory NHT
MORU		OZAR Ozark NSR
MOWO		PAALPalo Alto Battlefield NHS
MRCC	Mississippi River Corridor Study Commission	PAAVPennsylvania Avenue NHS
MWAC	Midwest Archeological Center	PAIS Padre Island NS
MWRO	Midwest Regional Office	PECO
MWSO	Midwest Support Office	PEFO Petrified Forest NP
NABR	Natural Bridges NM	PERIPea Ridge NMP
NACC		PETE Petersburg NB
NACC	Franklin Delano Roosevelt Memorial Park	PETRPetroglyph NM
NACC	Francis Scott Key Memorial	PEVI Perry's Victory and International Peace Memorial
NACE	National Capital Parks, East	PGSO Pacific Great Basin Support Office
NAMA	National Mall	PHSOPhiladelphia Support Office
NATC	Natchez NHP	PIMAHohokam Pima NM
NATR		PINN Pinnacles NM
NATR	Natchez Trace Parkway	PIPEPipestone NM
NAVA	Navajo NM	PIRO Pictured Rocks NL
NCRC	Northeast Cultural Resources Center	PISCPiscataway Park
NCRO		PISOPacific Islands Support Office
NCSO	National Capital Support Office	PISPPipe Spring NM
NEJE	New Jersey Coastal Heritage Trail Route	POEXPony Express NHT
NEPE	Nez Perce NHP	POGR
NERI		POHEPotomac Heritage NST
NERO	Northeast Regional Office	POPOPoverty Point NM
NICO	Nicodemus NHS	POREPoint Reyes NS
NIFC	National Interagency Fire Center, Boise	PRES
NIOB	Niobrara–Missouri NR	PRPA
NHOL	Ninety Six NHS	PRWI Prince William Forest Park

PUHE	Puukohola Heiau NHS	SPCO	Spanish Colonial Research Center
PUHO	Pu'uhonua o Honaunau NHP	STEA	Steamtown NHS
PWRO	Pacific West Regional Office	STLI	Statue of Liberty NM
RABR	Rainbow Bridge NM	STMA,	MATR Stephen T. Mather Training Center
REDW		STRC	Stones River National Cemetery
RICH	Richmond NBP	STRI	Stones River NB
RIGR	Rio Grande WSR	SUCR	Sunset Crater Volcano NM
ROCA		TAPR	Tallgrass Prairie NP
	Rock Creek Park	THKO.	Thaddeus Kosciuszko NM
ROLA	Ross Lake NRA	THRB.	Theodore Roosevelt Birthplace NHS
ROMO	Rocky Mountain NP		Theodore Roosevelt Inaugural NHS
ROVA	Home of Franklin D. Roosevelt NHS		Theodore Roosevelt NP
ROVA	Roosevelt-Vanderbilt Headquarters	THST	Thomas Stone NHS
	Roger Williams N MEM	TICA	Timpanogos Cave NM
RUCA	Russell Cave NM	TIMU	Timucuan Ecological and Historic Preserve
	San Antonio Missions NHP		Tonto NM
SACN	Saint Croix NSR	TOSY	Touro Synagogue NHS
SACR	Saint Croix Island International Historic Site	TRTE	Trail of Tears NHT
SAFE	Santa Fe NHT		Tuskegee Institute NHS
SAFR	San Francisco Maritime NHP		Tumacacori NHP
SAGA	Saint-Gaudens NHS		Tupelo NB
	Saguaro NP		Tuzigoot NM
	Sagamore Hill NHS	ULSG	
	Saugus Iron Works NHS	UNST	
	San Juan Island NHP		Upper Delaware Scenic and Recreational River
SAJU	San Juan NHS		U.S.S. Arizona Memorial
	Santa Monica Mountains NRA		
SAPA	Saint Paul's Church NHS	VICC	Vicksburg National Cemetery
SAPU	Salinas Pueblo Missions NM		Vicksburg NMP
	Saratoga NHP		Vietnam Veterans Memorial
SARI	Salt River Bay NHP and Ecological Preserve	VIIS	Virgin Islands NP
	Scotts Bluff NM		Voyageurs NP
	Southeast Archeological Center	WABA	
SEBE	Sewall-Belmont House NHS	WACA	Walnut Canyon NM
SEKI	Sequoia and Kings Canyon NP		
	Southeast Regional Office		
	Southeast Support Office	WASH.	
	Shenandoah NP		The Washington Office
			Weir Farm NHS
	Shiloh NMP		White House Liaison, Office of
	Sitka NHP		Whiskeytown-Shasta-Trinity NRA
	Sleeping Bear Dunes NL		
	Southern Arizona Group Office		
	Springfield Armory NHS		
	Intermountain Spanish Colonial Research Center		Wilson's Creek NB
	1		

YELL Yellowstone NP	WIHO William Howard Taft NHS	W
YOHOYucca House NM	WORI	W
YORK	WOTR	W
YOSE	WPTC Historic Preservation Training Center	W
YUCHYukon-Charley Rivers N PRES	WRBRWright Brothers NM	W
ZIONZion NP	WRST Wrangell-St. Elias NP and PRES	W
	WUPAWupatki NM	W

Missing or Undecided Acronyms

Battleground National Cemetery

Bear Paw Battle Ground

Chimney Rock NHS

Conservation Assistance Group

Constitution Gardens

Fort Jefferson NM

Mott Training Center

Southeast Land Acquisition Office

Theodore Roosevelt Island

U.S. Navy Memorial

Vietnam Womens Memorial

White House Visitor Center

Korean War Veterans Memorial

Measurement Unit Abbreviations

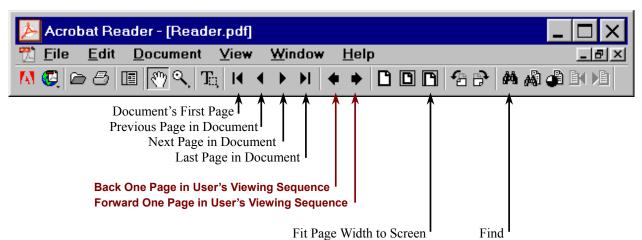
Wildcat Brook Wild and Scenic River

μ	micron	g	gram	cm ²	square centimeters
mm	millimeter	kg	kilogram	m^2	square meters
cm	centimeter	C	Celsius	km^2	square kilometers
m	meter	in	inch	L	liter, or don't abbreviate
km	kilometer	ft	foot, feet	amsl	above mean sea level
ha	hectare	mi	mile	cmbs	centimeters below surface
ml	milliliter	F	Fahrenheit	cmbd	centimeters below datum

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